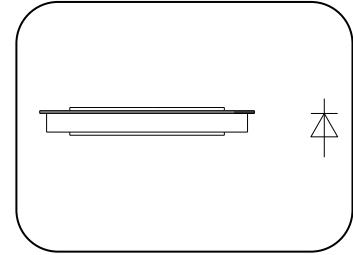


Features

- Optimized for high current rectifiers
- Very low threshold voltage and slop resistance
- Very low thermal resistance

$I_{F(AV)}$ 5000 A
 V_{RRM} 200~400 V
 I_{FSM} 45 kA
 I^2t 10000 10³A²s



Typical Applications

- High current application For Welders up to 5000Hz
- Electrode plating

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | T _j (°C) | VALUE | | | UNIT |
|---------------|--|---|---------------------|-------|------|-------|----------------------------------|
| | | | | Min | Type | Max | |
| $I_{F(AV)}$ | Mean forward current | 180° half sine wave 50Hz Double side cooled, T _c =100°C | 175 | | | 5000 | A |
| V_{RRM} | Repetitive peak reverse voltage | V_{RRM} tp=10ms $V_{RSM} = V_{RRM} + 100V$ | 175 | 200 | | 400 | V |
| I_{RRM} | Repetitive peak current | $V_{RM} = V_{RRM}$ | 175 | | | 50 | mA |
| I_{FSM} | Surge forward current | 10ms half sine wave $V_R = 0V_{RRM}$ | 175 | | | 45 | kA |
| I^2t | I ² T for fusing coordination | | | | | 10000 | A ² s*10 ³ |
| V_{FO} | Threshold voltage | $I_{FM} = 5000 \sim 15000A$ | 175 | | | 0.80 | V |
| r_F | Forward slop resistance | | | | | 0.030 | mΩ |
| V_{FM} | Max Peak on-state voltage | $I_{FM} = 5000A, F = 30kN$ | 25 | | | 1.05 | V |
| t_{rr} | Reverse recovery time | $I_{FM} = 1000A, tp = 2000\mu s, di/dt = -20A/\mu s,$ $V_R = 50V$ | 175 | | | 4.0 | μs |
| Q_{rr} | Recovery charge | | 175 | | | 200 | μC |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | Double side cooled Clamping force 30.0kN | | | | 0.010 | °C/W |
| $R_{th(c-h)}$ | Thermal resistance case to heat sink | | | | | 0.005 | |
| F_m | Mounting force | | | 20 | 30 | 40 | kN |
| T_{stg} | Stored temperature | | | -40 | | 175 | °C |
| W_t | Weight | | | | 150 | | g |
| Outline | P56 | | | | | | |

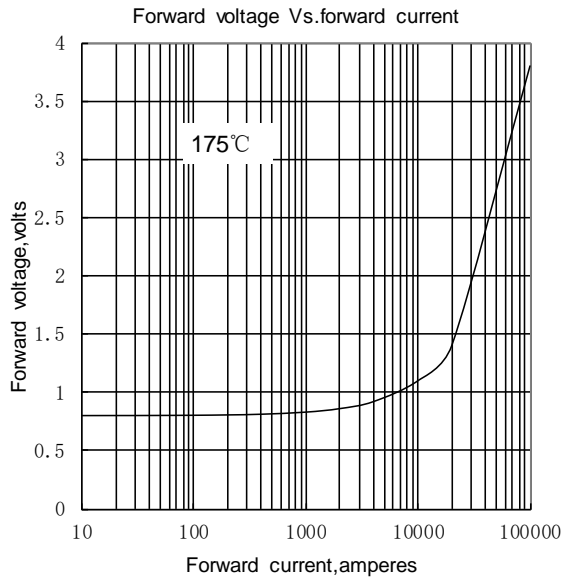


Fig.1

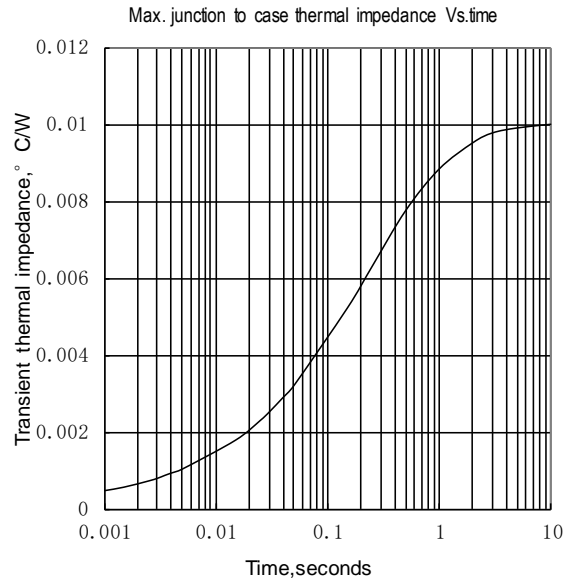


Fig.2

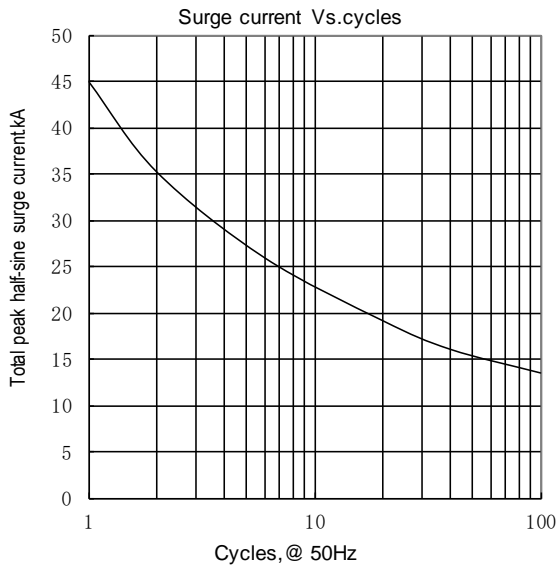


Fig.3

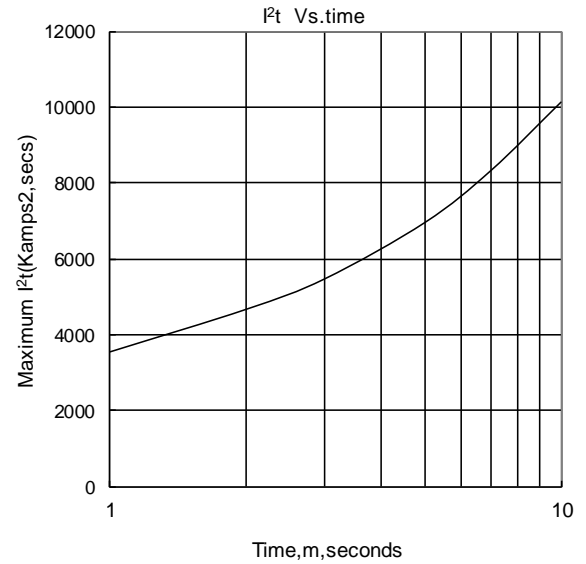


Fig.4

